



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/007,338	10/26/2001	Majid Syed	708034-605-001	3234
Blaney Harper Jones, Day, Reavis & Pogue 51 Louisiana Ave., NW Washington, DC 20001			EXAMINER LEE, PHILIP C	
			ART UNIT 2448	PAPER NUMBER
			MAIL DATE 06/09/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/007,338

Applicant(s)

SYED, MAJID

Examiner

PHILIP C. LEE

Art Unit

2448

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14, 16-36, 39, 40, 65-79 and 81-93 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14, 16-36, 39, 40, 65-79 and 81-93 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

1. This action is responsive to the amendment and remarks filed on March 25, 2009.
2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(c) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/25/09 has been entered.
3. Claims 1-14, 16-36, 39-40, 65-79 and 81-93 are presented for examination.
4. The text of those sections of Title 35, U.S. code not included in this office action can be found in a prior office action.

Objection

5. Claims 90-92 is objected to because of the following: Claims 90 (line 4), 91 (line 3) and 92 (line 6), "digital radio broadcast transmission" should be "the digital radio broadcast transmission". Claims 91 (line 2) and 92 (line 3), "a gateway" should be "the gateway". Claim 92, line 3, "a digital radio broadcast system" should be "the digital radio broadcast system".

6. Claims 1, 8, 13-14, 16, 18, 21-23, 25, 66, 73, 78-79, 81, 83, 86-87, 89-90 and 93 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pyhalammi et al, U.S. Patent Application Publication 2006/0073810 (hereinafter Pyhalammi) in view of Corts et al, U.S. Patent Application Publication 2002/0095228 (hereinafter Corts).
7. Pyhalammi and Corts were cited in the last office action.
8. As per claim 1, Pyhalammi taught the invention substantially as claimed comprising:
A gateway, the gateway comprising a processing system (inherently comprised in MCD 11, fig. 3); and
a memory coupled to the processing system (inherently comprised in MCD 11, fig. 3);
Said processing system comprising:
a network inbound queue (36, fig. 3) for the reception of data content and instructions from a content provider (page 3, paragraph 23);
a scheduler for processing said instructions from the content provider to determine broadcast times and schedule for said data content (page 3, paragraphs 24 and 25) (delivery class information) to be received by receivers of users (page 3, paragraph 25);
an addressing module for processing said instructions from the content provider for extracting addressing information (page 3, paragraphs 26 and 27); and
an outbound queue (36, fig. 3; 54, 55 of fig. 5) for storing said encoded data content (pages 3-4, paragraph 27).

9. Pyhalammi did not teach an encoder for encoding data and a receiver is a digital radio broadcast receiver. Corts taught a digital radio broadcast receiver ([0021]) and an encoder for encoding said data content for digital radio broadcast transmission ([0197], [0275], [0285]), the digital radio broadcast system processing the data content to be pushed to the digital radio broadcast receivers of the users via digital radio broadcast transmission without user-initiated requests for the data content ([0207]).

10. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Pyhalammi and Corts because Corts's teaching of encoder for encoding data would allow Pyhalammi's system to utilize In-Band On-Channel (IBOC) technology to broadcast digitized data along with the digital audio to wireless devices.

11. As per claim 66, Pyhalammi and Corts taught the invention substantially as claimed in claim 1 above. Pyhalammi further taught a content provider center (13, fig. 2) configured to communicate with said gateway (11, fig. 3).

12. As per claims 8 and 73, Pyhalammi and Corts taught the invention substantially as claimed in claims 1 and 66 above. Pyhalammi further taught a bandwidth module for bandwidth management, said bandwidth module maintaining queues and prioritizing flows per quality of service (QoS) traffic attributes while managing resources (page 3, paragraph 26).

13. As per claims 13-14 and 78-79, Pyhalammi and Corts taught the invention substantially as claimed in claims 1 and 66 above. Pyhalammi further taught a unique identifier, said identifier used in targeting said transmitted data content to a specific user agent (page 3, paragraph 26), and said identifier is an URI or a numeric value (page 3, paragraph 26).

14. As per claims 16 and 81, Pyhalammi and Corts taught the invention substantially as claimed in claims 1 and 66 above. Pyhalammi and Corts did not explicitly teach Turbo Broadcast Layer (TBL) encoder. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to include a TBL encoder or any type of encoder because by doing so it would increase the flexibility of their system by allowing data to be converted to different formats using different type of encoder.

15. As per claims 18, 25, 83, and 89, Pyhalammi and Corts taught the invention substantially as claimed in claims 1 and 66 above. Corts further taught data content is in any of the following formats: binary, plain text, HTML, XML, WML (fig. 1, i.e., binary signal broadcast across airwave), and wherein said encoded data content is in a digital broadcasting format suitable for reception via a digital consumer radio receiver (fig. 1, [0021]).

16. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Pyhalammi and Corts for the same reason as claim 1 above.

17. As per claims 21 and 86, Pyhalammi and Corts taught the invention substantially as claimed in claims 1 and 66 above. Pyhalammi further taught instructions include any of the following: time at which transmission is to commence, time at which transmission is to cease, or rate at which data content to be transmitted needs to be repeated (page 2, paragraph 18).

18. As per claim 22, Pyhalammi and Corts taught the invention substantially as claimed in claim 1 above. Corts further taught said gateway receives data content over a network (fig. 3; page 3, paragraph 23).

19. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Pyhalammi and Corts for the same reason set forth in claim 1 above.

20. As per claims 23 and 87, Pyhalammi and Corts taught the invention substantially as claimed in claims 22 and 66 above. Pyhalammi further taught said network comprises any of the following: local area network, wide area network, wireless network, or Internet (abstract).

21. As per claim 90, Pyhalammi and Corts taught the invention substantially as claimed in claim 1 above. Corts further taught comprising an exciter for receiving the encoded data content from the gateway and for broadcasting the encoded data content over the air via digital radio broadcast transmission ([0197]).

22. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Pyhalammi and Corts for the same reason set forth in claim 1 above.

23. As per claim 93, the claim is rejected for the same reason as claims 1 and 90 above.

24. Claims 5, 20, 26, 39, 65, 85 and 91-92 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pyhalammi and Corts in view of Garrity et al, U.S. Patent 6,745,237 (hereinafter Garrity).

25. Garrity was cited in the last office action.

26. As per claim 5, Pyhalammi and Corts taught the invention substantially as claimed as in claim 1 above. Pyhalammi and Corts did not teach an authenticator. Garrity taught an authenticator for authenticating a sender of said instructions (col. 4, lines 46-49).

27. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Pyhalammi, Corts, and Garrity because Garrity's teaching would increase the security of Pyhalammi's and Corts's systems to prevent unauthorized sender to utilize their systems.

28. As per claims 20 and 85, Pyhalammi and Corts taught the invention substantially as claimed in claims 1 and 66 above. Pyhalammi and Corts did not teach synchronized scheduling. Garrity taught wherein said gateway is networked for synchronized scheduling with one or more similar gateways (fig. 2; col. 3, lines 62-65).

29. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Pyhalammi, Corts, and Garrity because Garrity's teach of synchronized scheduling would enhance Pyhalammi's and Corts's systems by allowing data to be transmitted to a user in the proper sequence.

30. As per claims 26, 39, and 65, Pyhalammi taught the invention substantially as claimed comprising:

receiving at the gateway, data content and instructions from a content provider (page 3, paragraph 23);

processing said instructions from the content provider to determine broadcast times for said data content (page 3, paragraphs 24 and 25) to be received by receivers of a users (page 3, paragraph 25);

storing said encoded data content at a memory of the gateway(pages 3-4, paragraph 27).

31. Pyhalammi did not teach encoding data and a digital radio broadcast receiver. Corts taught a digital radio broadcast receiver ([0021], the digital radio broadcast system processing the data content to be pushed to the digital radio broadcast receivers of the users via digital radio

broadcast transmission without user-initiated requests for the data content ([0207]); encoding said data content for digital radio broadcast transmission using a processing system([0197], [0275], [0285]).

32. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Pyhalammi and Corts because Corts's teaching of data processor for encoding data would allow Pyhalammi's system to utilize In-Band On-Channel (IBOC) technology to broadcast digitized data along with the digital audio to wireless devices.

33. Pyhalammi and Corts did not teach authenticating said content provider. Garrity taught authenticating said content provider (col. 4, lines 46-49).

34. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Pyhalammi, Corts, and Garrity because Garrity's teaching would increase the security of Pyhalammi's and Corts's systems to prevent unauthorized sender to utilize their systems.

35. As per claim 91-92, Pyhalammi, Corts and Garrity taught the invention substantially as claimed in claims 26 and 39 above. Corts further taught comprising broadcasting the encoded data content over the air via digital radio broadcast transmission using an exciter ([0197]).

36. Claims 2, 3, and 67-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pyhalammi and Corts in view of Miller, U.S. Patent Application Publication 2003/0055977 (hereinafter Miller).

37. Miller was cited in the last office action.

38. As per claims 2 and 67, although Corts taught IBOC enabled devices ([0021]), however, Pyhalammi and Corts did not teach profile defining specific data content formats. Miller taught a device profile database holding profile associated with consumer devices, and each of said profile defining one or more specific data content formats for said transmission (page 4, paragraph 36).

39. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Pyhalammi, Corts, and Miller because Miller's teaching of device profiles would increase the alertness of their system by providing profiles information regarding data format and modality that are compatible with the device of the profile.

40. As per claims 3 and 68, Pyhalammi, Corts and Miller taught the invention substantially as claimed as in claims 2 and 67 above. Although, Miller taught identifying said one or more specific data content formats associated with one or more specific clients (page 4, paragraph 36), however, Miller did not explicitly teach a request for identifying data content formats. It would

have been obvious to one having ordinary skill in the art at the time of the invention was made to include a request for identifying data content format associated with the clients because by doing so it would increase the alertness of their system by providing profiles information regarding data format and modality that are compatible with the device of the profile.

41. Claims 4 and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pyhalammi and Corts in view of Hirayama, U.S. Patent Application Publication 2006/0069718 (hereinafter Hirayama).

42. As per claims 4 and 69, Pyhalammi and Corts taught the invention substantially as claimed as in claims 1 and 66 above. Pyhalammi and Corts did not teach unique ID associated with sender. Hirayama taught a identification (ID) processor for extracting a unique ID associated with sender of said received instructions, assigning a unique ID associated with broadcast transmissions, and storing said unique ID associated with the sender of said instructions and said unique ID associated with broadcast transmissions ([0136], [0146], fig. 12)

43. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Pyhalammi, Corts and Hirayama because Hirayama's teaching of unique ID associated with sender would increase the alertness of Pyhalammi's and Corts's systems by allowing the push initiator to be determined according to the identifier embedded in the message.

44. Pyhalammi, Corts, and Hirayama's did not explicitly teach push transmissions. It would have been obvious to one having ordinary skill in the art at the time of the invention was made that broadcasting can includes push transmission, hence the a unique ID associated with broadcast will be ID associated with push transmission, in order to allow data to be broadcast to user without user request.

45. Claims 9 and 74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pyhalammi and Corts in view of Kadyk et al, U.S. Patent 7,046,691 (hereinafter Kadyk).

46. Kadyk was cited in the last office action.

47. As per claims 9 and 74, Pyhalammi and Corts taught the invention substantially as claimed in claims 8 and 73 above. Pyhalammi and Corts did not teach active queues and a passive queue. Kadyk taught an active queue storing data content currently being transmitted (250, fig. 2; col. 9, line 50-col. 10, line 3) and a passive queue storing pushed and pulled data content (230, fig. 2; col. 8, lines 38-45).

48. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Pyhalammi, Corts, and Kadyk because Kadyk teaching of active queue and passive queue would increase the flexibility of Pyhalammi's and Corts's system by allowing the system to read the message from the queue when the system is ready to process a new message (col. 8, lines 40-45).

49. Claims 10, 17, 24, 75, 82, and 88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pyhalammi and Corts in view of Official Notice.

50. As per claims 10 and 75, Pyhalammi and Corts taught the invention substantially as claimed in claims 1 and 66 above. Pyhalammi and Corts did not teach a cache. "Official Notice" is taken for the concept of a cache for holding data content to be broadcast is known and accepted in the art. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to include a cache because by doing so it would increase the efficiency of their system by allowing frequently requested data to be stored and quickly accessed.

51. As per claims 17 and 82, Pyhalammi and Corts taught the invention substantially as claimed in claims 1 and 66 above. Pyhalammi and Corts did not teach different protocols. "Official Notice" is taken for the concept of point-to-point protocol (PPP), hypertext transfer protocol (HTTP), or wireless access protocol, are well known in the art. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to include different protocol such as HTTP because by doing so it would increase the functionality of their system by allowing browsers to requests webpage from web server on the Internet.

52. As per claims 24 and 88, Pyhalammi and Corts taught the invention substantially as claimed in claims 1 and 66 above. Pyhalammi and Corts did not teach a network database

identifying other databases. "Official Notice" is taken for the concept of network database such as Domain Name System (DNS) server identifying other databases is known and accepted in the art. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to include network database such as Domain Name System (DNS) server because by doing so it would increase the alertness of their systems by providing Internet Protocol address in response to domain name query.

53. Claims 11 and 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pyhalammi and Corts in view of Marlow, U.S. Patent Application Publication 2003/0046670 (hereinafter Marlow).

54. Marlow was cited in the last office action.

55. As per claims 11 and 76, Pyhalammi and Corts taught the invention substantially as claimed in claims 1 and 66 above. Pyhalammi and Corts did not teach precompiled binary data. Marlow taught precompiled binary data for transmission (page 3, paragraph 36).

56. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Pyhalammi, Corts, and Marlow because Marlow's teaching of precompiled binary data for transmission would increase the user flexibility of Pyhalammi's and Corts's systems by data to be transformed to values appropriate for viewing by the user at a remote location (page 3, paragraph 36).

57. Claims 12 and 77 rejected under 35 U.S.C. 103(a) as being unpatentable over Pyhalammi and Corts in view of Ellis et al, U.S. Patent Application Publication 2004/0194131 (hereinafter Ellis).

58. Ellis was cited in the last office action.

59. As per claims 12 and 77, Pyhalammi and Corts taught the invention substantially as claimed in claims 1 and 66 above. Although Pyhalammi taught processes information for broadcasting encoded data content (page 2, paragraph 21; page 3, paragraph 25), however, Pyhalammi and Corts did not teach zone information. Ellis taught processes information defining various time zones for broadcasting said encoded data content (page 10, paragraphs 139 and 140).

60. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Pyhalammi, Corts, and Ellis because Ellis teaching of defining zone information would increase the flexibility of Pyhalammi's and Corts's systems by allowing data content to be presented to a user based on a defined schedule.

61. Claims 19 and 84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pyhalammi and Corts in view of Thompson et al, U.S. Patent 6,907,247 (hereinafter Thompson).

62. Thompson was cited in the last office action.

63. As per claims 19 and 84, Pyhalammi and Corts taught the invention substantially as claimed in claims 1 and 66 above. Pyhalammi and Corts did not teach a timer for tracking timeout. Thompson taught a timer for tracking a predefined timeout for which transmission of data content occurs (col. 4, lines 3-19).

64. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Pyhalammi, Corts, and Thompson because Thompson's teaching of a timer for tracking timeout would increase the efficiency of Pyhalammi's and Corts's systems by allowing resources to be released by a user when a timeout period has expired, hence the released resources can be allocated to other users.

65. Claims 6-7 and 71-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pyhalammi, Corts, and Hirayama in view of Lin et al, U.S. Patent Application Publication 2002/0146016 (hereinafter Lin).

66. Lin was cited in the last office action.

67. As per claims 6 and 71, Pyhalammi, Corts, and Hirayama taught the invention substantially as claimed as in claims 4 and 69 above. Although Pyhalammi taught said broadcast outbound queue transmitting data content to an external broadcasting network (pages 3-4,

paragraph 27), however, Pyhalammi did not teach transmitting data content to said sender of said instructions. Lin taught network outbound queue transmitting data content to said sender of said received instructions (140, fig. 6; page 4, paragraph 53).

68. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Pyhalammi, Corts, Hirayama, and Lin because Lin's teaching of queue for transmitting data content to said sender would increase the reliability of their system by allowing packet to be queue in order to retransmit lost packets (page 4, paragraph 53).

69. As per claims 7 and 72, Pyhalammi, Corts, Hirayama and Lin taught the invention substantially as claimed as in claims 6 and 71 above. Corts further taught an in-band on-channel (IBOC) digital radio broadcast transmission (page 13, paragraph 304).

70. As per claims 27-36 and 40, they fail to define the above and beyond claims (already rejected claims 2, 3, 10 12-14, 18, 23 and 25).

71. Claim 70 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pyhalammi, Corts, and Hirayama in view of Garrity.

72. As per claim 70, Pyhalammi, Corts, and Hirayama taught the invention substantially as claimed in claim 69 above. Pyhalammi, Corts, and Hirayama did not teach an authenticator.

Garrity taught an authenticator for authenticating a sender of said instructions (col. 4, lines 46-49).

73. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Pyhalammi, Corts, Hirayama, and Garrity because Garrity's teaching would increase the security of Pyhalammi's, Corts's, and Hirayama's systems to prevent unauthorized sender to utilize their systems.

74. Applicant's arguments with respect to claims 1-14, 16-36, 39-40, 65-79 and 81-93, filed 03/25/09 have been considered but they are not persuasive.

75. In the remarks, applicant argued that:

- (1) The rejection does not state a proper reason for the hypothetical combination of references, nor would there be an expectation of success.
- (2) The cited references fail to teach that the digital radio broadcast system processes the data content to be pushed to the digital radio broadcast receivers of the users via digital radio broadcast transmission without user-initiated requests for said data content.

76. In response to point (1), page 19 of the applicant's remarks filed on 3/25/09 states: "Moreover, it is believed that one skilled in the art would not have found it obvious to modify the Pyhalammi system to use the in-band on-channel (IBOC) broadcasting of Corts in the manner

suggested by the Office since there would be no expectation of success.” Examiner disagreed. Although Pyhalammi teaches providing digital server, however, Pyhalammi does not specifically teach that the digital services are provided utilizing IBOC. Corts's teaching provides the ability for IBOC enabled wireless terminal device to interact with the broadcast, including purchase of goods and service by a user of the IBOC enabled wireless terminal device ([0021]). the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). Using the teaching of Corts, one of ordinary skill in the art can modify Pyhalammi's system by programming Pyhalammi's system to transmit digital data over their current analog transmission frequency (see Corts, [0002]), and providing cellular phones and computers with IBOC chips sets (see Corts, [0021]), hence allowing a IBOC enabled device to IBOC technology to broadcast digitized data along with the digital audio to wireless devices. The teaching of Corts contained detailed enabling methodology and included the suggestion that the modification of Pyhalammi's system would be successful for IBOC technologies. Thus, there was a reasonable expectation of success.

77. In response to point (2), according to page 1, lines 17-20 of the specification, "Broadcast media, on the other hand, utilize Push technologies because information is sent out (pushed) regardless of whether anyone is tuned in." (i.e., data content to be pushed to the digital radio

broadcast receivers of the users via digital radio broadcast transmission without user-initiated requests for said data content). Similarly, Corts teaches a DRBS processing the data to be pushed (broadcasted to the user) at regular intervals during particular times of the broadcast day, including the time at which the data should be broadcast ([0207]). Since the data is scheduled to be data-cast at regular intervals during particular time of the day, therefore the data is broadcasted regardless of whether a user initiates a request for the data (i.e., regardless of whether the user is tuned in).

78. A shortened statutory period for reply to this Office action is set to expire THREE MONTHS from the mailing date of this action. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip C Lee whose telephone number is (571)272-3967. The examiner can normally be reached on 8 AM TO 5:30 PM Monday to Thursday and every other Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Firmin Backer can be reached on (571) 272-6703. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/007,338

Page 21

Art Unit: 2448

/Philip C Lee/

Primary Examiner, Art Unit 2448